propagation of species planted as part of the project as well as other desirable native plant species. These measures could include placing wire mesh around the bases of tree plantings to provide protection from beavers and rabbits and placing wire mesh in a bowl shape around roots to protect the seedlings from gophers during establishment.

Project Monitoring. After project construction, a two-year monitoring program will be undertaken to provide information on the use of the tidal wetland by special-status fish species and other protected species. The reestablishment of the tidal wetland and upland habitat improvements will be periodically photo-documented. The data collected would be used to assess early transitions in hydraulic, water quality, and biological conditions. A more detailed description of project monitoring activities is provided in the Monitoring and Data Collection Methodologies section on page 10.

Proposed Scope of Work. The project involves three phases. Phase I includes finalization of the project design, compliance with CEQA and NEPA (as applicable), development of the monitoring/methods program, and acquisition of required permits. The Final Project Design Report, revised and final Initial Study/Environmental Assessment, proposed and adopted Negative Declaration and Finding of No Significant Impact (FONSI), as appropriate, and Project Monitoring/Methods Plan will be the deliverables completed during this phase. Along with the scientific collection permit, other permits and approvals may be required including a Streambed Alteration Agreement, Section 404 Permit, water quality certification, Solano County grading permit, and written concurrence from the USFWS, NMFS, and the CDFG of no adverse project effects to ESA listed and proposed listed species.

Project construction and vegetation plantings will occur during Phase II. Construction bids will be solicited and contract(s) awarded based on applicable CALFED contracting requirements. Construction activities will be monitored by a construction inspector and completed work will be documented. A project Construction Report documenting as-built conditions will be prepared and submitted to CALFED at the conclusion of this project phase.

Phase III involves a two-year post-construction monitoring program. Specific information will be collected to assess utilization of the restored wetland by juvenile and larval life stages of special-status fish species, utilization of different habitat types by special-status fish species, relationships between habitat conditions and fish species use, rates and successional patterns of vegetation communities, and success of revegetation efforts. Data will be collected through seining, light trapping, water quality measurements, and surveys. Monitoring results will be presented in annual monitoring reports.

An additional task will include project management, which will occur through all project phases. As a part of this task, quarterly progress reports will be prepared and submitted to CALFED. Other project management tasks will include subcontract administration, budget and deliverable tracking, and quality assurance and reviews by senior technical team members. The project schedule is provided in the Cost section of the proposal on page 14.

If the entire project cannot be funded, inseparable tasks would include final design of the riverbank breach, permit acquisition, construction of the riverbank breach, project monitoring, and project management.

Ecological/Biological Benefits

Project Objectives. The ecological and biological objectives of the Decker Island Tidal Wetland Enhancement Pilot Project are to:

- Create self-sustaining tidally influenced wetland habitat that directly benefits special-status aquatic species (e.g., delta smelt, Sacramento splittail, all runs of chinook salmon, and steelhead), and indirectly benefits riparian and terrestrial species along the Sacramento River (between Browns Island and Cache Slough/Prospect Island) where such resources are limited.
- ► Structure the enhancements and monitoring program as a pilot project that provides species habitat use, ecosystem development, and fish monitoring knowledge that directly benefits ongoing planning efforts for future larger-scale Delta restoration plans.

Project Need. While tidal wetland habitat has been shown to be important for special-status fish species, more conclusive information is needed on the function of tidal wetlands as habitat for splittail and Delta smelt, and as rearing habitat for chinook salmon and steelhead. There is an underlying assumption to ecosystem restoration projects that the limited extent of wetland habitat is restricting the populations of species of interest in the Delta. However, this premise has not been tested for many species in the estuary (CALFED ERP Volume 1, Pg.111). This project, because of its relatively controlled setting (one point for tidal flow and limited area) and its location on the Sacramento River, will provide information on the use of the tidal wetland by several aquatic and terrestrial species and will provide some insight into the validity of this assumption.

Project Focus. This project focuses on tidal wetland habitat and its relationship to selected fish species listed, or proposed for listing, under the ESA (i.e., delta smelt, Sacramento splittail, steelhead, and all Sacramento River runs of chinook salmon). For chinook salmon and steelhead, Decker Island and adjacent shoal areas in Horseshoe Bend may represent important rearing habitat. Decker Island is also located within the "critical habitat" area designated for delta smelt. Flooded island habitats have been identified by the NMFS as one of the elements to promote recovery of the delta smelt (Recovery Plan for the Sacramento/San Joaquin Delta Native Fishes, 1997). Shallow water tidal marsh habitat is also known to be valuable to splittail. The project also will revitalize an existing cottonwood gallery on the Horshoe Bend riverbank, which supports a heron rookery.

The habitat created by this project will also help to offset habitat loss and degradation that have occurred along this section of the Sacramento River as a result of stressors related to levee and bank stabilization, water diversions, dredging, invasive aquatic species, and project-site-specific grazing pressure on riparian and intertidal vegetation along the shoreline of Horseshoe Bend.

Project Benefits. This project will have numerous benefits, both primary and secondary, including:

- permanent removal of grazing pressure on current project site riparian and inter-tidal habitat;
- increased habitat for numerous special-status fish, waterfowl, other wildlife, and plant species;
- greater understanding of the hydraulic and biological processes for tidal wetlands and the use of shallow water habitat by resident Delta fish species and anadromous fish species; and
- ▶ an increase (140 acres) in the amount of Delta land dedicated to ecosystem enhancements.

Benefits will also be realized indirectly. These secondary benefits include:

- increased primary productivity and nutrient cycling; and
- valuable information for future Delta wetland restoration projects.

Project Questions/Hypotheses. Questions to be addressed in the proposed and future monitoring efforts at Decker Island include:

- ▶ Will larval and juvenile life stages of the target fish species (e.g., chinook salmon, steelhead, delta smelt, and splittail) utilize the restored wetland?
- ▶ Do the fish species and life stages using the restored wetland use the various habitat types created differentially?
- ▶ What are the relationships between specific water quality parameters (e.g., salinity) and target fish species use of the restored wetland habitats monitored?
- ▶ What are the growth rates and successional patterns of riparian and intertidal vegetation communities where restoration plantings are made?
- Is vegetation planting an effective measure in wetland restoration?
- Are the restoration techniques used in this pilot project successful in restoring and maintaining the physical habitat features?
- ▶ Will the restoration techniques applied in this pilot study effectively control the proliferation of invasive non-native plant species?

Project Durability. The project emphasizes the development of a permanent, self-sustaining system. Approximately 100 acres of the project site will become a tidal wetland, with the remaining 40 acres as riparian and upland habitat. Integration of aquatic, riparian, and upland ecosystem components characteristic of a variety of native Delta habitats provides an ecosystem-based approach for the project. This project will be a cost-effective contribution to CALFED's adaptive management approach to ecosystem restoration because it serves as a comprehensive ecosystem restoration model which, although on a small scale, will provide valuable information applicable to larger scale projects.

Relationship to Past and Future Projects. The increase in habitat for special-status fish species will contribute to goals of the Central Valley Project Improvement Act (CVPIA) Anadromous Fisheries Restoration Program, endangered species recovery plans implemented as part of the ESA including the Recovery Plan for the Sacramento/San Joaquin Delta Native Fishes (USFWS 1996) and the NMFS proposed Recovery Plan for the Sacramento River Winter-Run Chinook Salmon (NMFS 1997). The wetland will also serve as waterfowl habitat which will benefit the Central Valley Habitat Joint Venture, a component of the USFWS's North American Waterfowl Management Plan. Future projects that would benefit from an increase in special-status fish habitat include recovery plans for delta smelt, splittail, steelhead, and chinook salmon.

Current Project Status. The project was initiated in 1996 as part of the Category III funded proposals. As part of the project, grazing was indefinitely eliminated from the Port's property in 1997. During 1997 and 1998, a draft project design and draft monitoring program were developed, along with monitoring and research programs associated with DWR and UCD. In early 1998, an agreement on land rights could not be reached, and the project stopped following the February 1998 Briefing to the IEP. The current proposal enlarges the project area to 140 acres, from the original 70 acres proposed.

Relationship to ERP Future Actions and Goals. The tidal wetland on Decker Island will assist CALFED with numerous ERP goals, objectives, and actions. The habitat will contribute to CALFED's goals of achieving self-sustaining populations of at-risk native species dependent on the Delta and rehabilitating natural processes of the aquatic and associated terrestrial communities in the Bay-Delta system. In terms of CALFED objectives, the project will specifically contribute to restoration of multiple Delta species listed and proposed for listing under the ESA, along with providing habitat for migratory bird species and enhancing Delta marsh habitat (Strategic Plan, Table 5-1, Summary of Strategic Goals and Objectives).

The project will also help implement several Sacramento-San Joaquin Delta Management zone targets, programmatic actions, and Stage 1 Action, identified in the Ecological Management Zone Visions. These actions include:

- ▶ Restore tidal wetlands in Decker Island on the Port of Sacramento Property (Stage 1 Action of Fresh Emergent Wetland Habitat (Tidal), Volume 2, pg. 99);
- ► Convert leveed lands to tidal wetland/slough complexes in the North Delta Ecological Management Unit (Programmatic Action 1A, Volume 2, pg.91);
- ▶ Restore 3,000 to 4,000 acres of tidal perennial aquatic habitat and 20,000 to 25,000 acres of tidally influenced freshwater marsh (Programmatic Action 2A, Volume 2, pg. 93);
- Actions to restore streamflow, floodplain flooding, Delta hydraulics, tidal wetlands and sloughs, and riparian habitat would increase primary and secondary productivity in the Delta (Programmatic Action 2A, Volume 2, pg. 95); and
- ▶ Restore 1,500 acres of shallow-water habitat in the North Delta Ecological Management Unit (Target 1 of Tidal Perennial Aquatic Habitat, Volume 2, pg. 96).

The Decker Island tidal wetland will also be a component of the North Delta Habitat Corridor. The Stage 1 proposal for the North Delta is to restore a large, contiguous habitat corridor connecting a mosaic of tidal marsh, seasonal floodplain, riparian, and upland grassland habitats (Strategic Plan, pg. 47). This project may set the stage for ecosystem projects on other Port lands in the North Delta habitat corridor, and other actions outlined in the Phase II Report.

Relationship to Legal Obligations and Agency Mandates. The project is not associated with any legal obligations or agency mandates.

System-Wide Ecosystem Benefits. This tidal wetland restoration project will provide numerous system-wide ecosystem benefits. In addition to complementing programs and plans related to the CVPIA, ESA, and other habitat ventures as presented above, the project will provide geographically strategic habitat between existing upstream and downstream habitat, such as that provided by Suisuin Marsh and Prospect Island.

Benefits and Conflicts to Other CALFED Objectives. CALFED has identified four problem areas and objectives to address those areas, which include Ecosystem Quality, Water Quality, Water Supply Reliability, and Levee System Integrity. As discussed above, the project will provide many benefits to the area of Ecosystem Quality. The project will also provide an opportunity to study the effect of wetland creation upon Water Quality that cannot be accomplished elsewhere. Specifically, the project provides an opportunity for DWR's MWQI Program or other entity to study the potential effects of wetland creation on drinking water quality parameters. The MWQI Committee provided funding and developed a water quality study program for the previous CALFED Decker Island project and is anticipated to do the same with this project. The objectives of such a study would be to monitor and attempt to quantify the changes in organic carbon (TOC and DOC) that are generated by development of the wetland. Graduate students of the UCD Department of Land, Air, and Water have also expressed preliminary study interests at the site.

Benefits and Conflicts to Other CALFED Programs. CALFED has developed eight program elements to carry out the strategies planned for the above-mentioned problem areas. Direct benefits will occur for both the Ecosystem Restoration Program and the Water Quality Program. The project will not conflict with the development or implementation of any program measures or activities.

Third Party Benefits. Decker Island is a remote site that could provide research opportunities to third parties, including state and federal agencies, universities, and conservation organizations.

Technical Feasibility and Timing

Project Alternatives. Project alternatives include various configurations and number of riverbank breaches, feeder channels, and habitat mounds. Early project plans considered multiple riverbank breaches, however, it was decided to have one breach to reduce costs, minimize environmental effects, and maintain optimum hydraulic conditions for tidal flows. An increased number of feeder channels and differing shapes, such as a "U" shape, were considered. It was determined that "U"-shaped channels could lead to drainage problems and an increased number of feeder channels might limit the extent of usable habitat. Third-order "engineered" channels were dismissed in favor of allowing tidal-generated small-channel development

Compliance with Applicable Environmental Laws, Approvals, and Requirements. On December 8, 1997, the Commission of the Port of Sacramento considered and issued a proposed Negative Declaration for the project. No substantive comments were received during the 30-day noticing period. Verbal comments from nearby landowners regarding project location were addressed without issue. Verbal comments were also received from the CDFG and concerned construction sequencing, survey for the Suisun marsh aster, and design of the riverbank breach. The CDFG's comments were addressed through explanation of the proposed staging of construction activities, and by affirming the project plans to survey for marsh aster prior to construction.

Following the 30-day public review period, DWR submitted a letter to the Port raising certain questions regarding the potential effects of the project including water quality and changes in local populations of endangered species. These comments were discussed with DWR representatives and have been considered in preparing the project design. DWR's interest in potential water quality effects led to its earlier plans to conduct a water quality monitoring program as discussed in the previous section.

A revised proposed Negative Declaration may need to be issued depending on tidal design. Further, several permits and agreements may have to be obtained for the project. These include a scientific collection permit, Nationwide 27 Permit from the Corps, a Streambed Alteration Agreement from the CDFG, ESA and CESA consultations, a water quality certification from the Central Valley Regional Water Quality Control Board (RWQCB), and a grading permit from Solano County. To obtain the Section 404 Permit and complete the ESA consultation, the project may need to comply with the National Environmental Policy Act (NEPA). It is anticipated that the California Environmental Quality Act (CEQA) document completed for the project could be used with minor modification to fulfill NEPA requirements.

Regardless of the final land rights agreement between CALFED and the Port (i.e., either securing a permanent easement or outright purchase), responsibility for post-project site management will be conveyed to another public agency.

Project Constraints. The only project constraint that could affect the project schedule is land rights negotiations between the Port and CALFED. Prior to any work being performed on the project, a final agreement for land rights will need to be reached between the Port and CALFED. Once the agreement is reached, Phase I of the project, final design, could move forward.

Monitoring and Data Collection Methodology

Biological/Ecological Objectives. Project monitoring will focus on the process and success of restoring a tidal wetland and the use of that wetland by special-status species, particularly listed and proposed listed fish species. The two-year monitoring program will also provide important information on what physical, chemical, and biological factors appear to influence fish use of the habitats during the early stages of ecosystem development. The two-year monitoring program will be structured to provide initial data that will be used to design a longer-term (5 to 10 years) monitoring program for the site and to benefit ongoing planning efforts for future larger-scale Delta restoration plans. Because there is no existing aquatic habitat on Decker Island, there will be no need to conduct baseline fish studies.

Monitoring Parameters and Data Collection Approach. Monitoring will be performed to assess the trends and seasonal differences in the tidal wetlands over the first two years, primarily focusing on fish, vegetation plantings, and water quality. Periodic field surveys, collections, and water sampling will measure physical, chemical, and biological parameters within the restored wetland and in the near-shore zone along the Horseshoe Bend area. Specific monitoring locations will be determined after the project design has been finalized. Physical parameters include depth, tidal condition, and channel erosion and sedimentation patterns. Chemical parameters include temperature, dissolved oxygen, turbidity, salinity, conductivity, and pH. Biological parameters consist of vegetation communities (emergent, submerged, and floating), fish composition (including species and life stage) and relative abundance, and vegetation plantings success and development (Table 1).

Monthly surveys will include seining for fish, visual inspections of plantings, and measurements of temperature, turbidity, salinity, dissolved oxygen, conductivity, and pH. Light traps for larval fish may be used depending on final design of the monitoring program. Final design of the monitoring program will be developed with the participation of the IEP and will be used to establish protocols to be followed throughout project monitoring activities.

Data Evaluation Approach. Data collected will be used to assess fish use of different aquatic habitat types created by the project. Data of fish populations within Horseshoe Bend will be reviewed and evaluated, relative to project data collection and analysis. The monitoring program will determine, to the extent possible, physical and chemical factors explaining fish species composition, distribution, and relative abundance. Evaluation and monitoring of vegetation will be performed to assess the condition and success of the project plantings over time, as well as the colonization of the wetland by emergent wetland and non-planted species. Data collection will also supply information for the assessment of habitat use by special-status wildlife species. Data collected during field surveys will be statistically analyzed using analysis of variance, multiple comparison, and regression procedures (Table 1).

Reports and Information Management. Annual reports will be prepared on a calendar year basis that summarize the results of the monitoring programs and provide the field data collected during the preceding year. Interpretation of the data will be provided to the extent possible and trends and projections of ecosystem transition will be noted. Specific evaluations will address the use and distribution of special-status fish species. Results of the monitoring program will be presented to the IEP for peer review. Copies of annual reports will be distributed to interested agencies, project participants, and CALFED representatives.

INSTRUCTIONS FOR THE SF 424C

Public reporting burden for this collection of information is estimated to average 180 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0041), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

This sheet is to be used for the following types of applications: (1) "New" (means a new [previous unfunded] assistance award); (2) "Continuation" (means funding in a succeeding budget period which stemmed from a prior agreement to fund); and (3) "Revised" (means any changes in the Federal government's financial obligations or contingent liability from an existing obligation). If there is no change in the award amount there is no need to complete this form. Certain Federal agencies may require only an explanatory letter to the effect minor (no cost) changes. If you have questions please contact the Federal agency.

Column a.--If this is an application for a "New" project, enter the total estimated cost of each of the items listed on lines 1 through 16 (as applicable) under "COST CLASSIFICATIONS."

If this application entails a change to an existing award, enter the eligible amounts approved under the previous award for the items under "COST CLASSIFICATION."

Column b.—If this is an application for a "New" project, enter that portion of the cost of each item in Column a, which is not allowable for Federal assistance in determining the allowability of specific costs.

If this application entails a change to an existing award, enter the adjustment [+ or (-)] to the previously approved costs (from column a.) reflected in this application.

Column c.--This is the net of lines 1 through 16 in columns "a," and "b."

Line 1--Enter estimated amounts needed to cover administrative expenses. Do not include costs which are related to the normal functions of government. Allowable legal costs are generally only those associated with the purchase of land which is allowable for Federal participation and certain services in support of construction of the project.

Line 2--Enter estimated site and right(s)-of-way acquisition costs (this includes purchase, lease, and/or easements).

Line 3--Enter estimated costs related to relocation advisory assistance, replacement housing, relocation payments to displaced persons and businesses, etc.

Line 4--Enter estimated basic engineering fees related to construction (this includes start-up services and preparation of project performance work plan).

Line 5--Enter estimated engineering costs, such as surveys, tests, soil borings, etc.

Line 6--Enter estimated engineering inspection costs.

Line 7--Enter estimated costs of site preparation and restoration which are not included in the basic construction contract.

Line 9--Enter estimated cost of the construction contract.

Line 10--Enter estimated cost of office, shop, laboratory, safety equipment, etc. to be used at the facility, if such costs are not included in the construction contract.

Line 11--Enter estimated miscellaneous costs.

Line 12-Total of items 1 through 11.

Line 13--Enter estimated contingency costs. (Consult the Federal agency for the percentage of the estimated construction cost to use.)

Line 14--Enter the total of lines 12 and 13.

Line 15-Enter estimated program income to be earned during the grant period, e.g., salvaged materials, etc.

Line 16-Subtract line 15 from line 14.

Line 17-This block is for the computation of the Federal share. Multiply the total allowable project costs from line 16, column "c." by the Federal percentage share (this may be up to 100 percent; consult Federal agency for Federal percentage share) and enter the product on line 17.

ASSURANCES -- CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503.

PLEASE <u>DO NOT</u> RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

- Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
- 2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- 3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
- 4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
- 5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
- Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

- 8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. Secs. 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
- Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. Secs. 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
- 10. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. Secs. 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. Secs. 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. Secs. 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) Secs. 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. Secs. 3601 et seq.), as amended, relating to non-discrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made, and (j) the requirements of any other non-discrimination Statute(s) which may apply to the application.

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- 11. Vill comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
- 12. Will comply with the provisions of the Hatch Act (5 U.S.C. Secs. 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
- 13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. Secs. 276a to 276a 7), the Copeland Act (40 U.S.C. Secs. 276c and 18 U.S.C. Sec. 874), the Contract Work Hours and Safety Standards Act (40 U.S.C. Secs. 327-333), regarding labor standards for federally assisted construction subagreements.
- 14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the

- National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. Secs. 1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. Secs. 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
- 16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. Secs. 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
- 17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. Sec. 470), EO 11593 (identification and preservation of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
- Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.
- 19. Will comply with all applicable requirements of all other Federal laws, Executive Orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
	Partner
APPLICANT ORGANIZATION	DATE SUBMITTED
Surface Water Resources,	Inc. 4/16/99

U.S. Department of the Interior

Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (Di-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

CHECK IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezziement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

CHECK IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it not its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken employees for violation of such prohibition; (b) Establishing an ongoing drug-free awareness program to inform employees about— (1) The dangers of drug abuse in the workplace; (2) The grantee's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace; (b) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy statement required by paragraph (a); (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy statement required by paragraph (a); (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the employee will — (1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring workplace no later than five calendar days after such conviction; (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must notice, including position title, to every grant officer on whose grant activity the convicted employee was we unless the Federal agency has designated a central point for the receipt of such notices. Notice shall includentification numbers(s) of each affected grant; (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(respect to any employee who is so convicted — (1) Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation. Act of 1973, as amended; or (2) Requiring such employee to pa	PART C:	Certification Regarding Drug-Free Workplace Requirements
A. The grantee certifies that it will or continue to provide a drug-free workplace by: (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken employees for violation of such prohibition; (b) Establishing an ongoing drug-free awareness program to inform employees about— (1) The dangers of drug abuse in the workplace; (2) The grantee's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and (4) The penalites that may be imposed upon employees for drug abuse violations occurring in the workplace; (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy statement required by paragraph (a); (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the employees will — (1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring workplace no later than five calendar days after receiving notice under subparagraph (d)(2) from employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must notice, including position title, to every grant officer on whose grant activity the convicted employee was a unless the Federal agency has designated a central point for the receipt of such notices. Notice shall inclidentification numbers(s) of each affected grant; (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(respect to any employee who is so convicted— (1) Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation. Act of 1973, as amended; or cereiving about employee to participate satisfactorily in a dr		CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.
(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken employees for violation of such prohibition; (b) Establishing an ongoing drug-free awareness program to inform employees about— (1) The dangers of drug abuse in the workplace; (2) The grantee's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace; (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy statement required by paragraph (a); (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the employee will — (1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring workplace no later than five calendar days after such conviction; (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) free employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must notice, including position title, to every grant officer on whose grant activity the convicted employee was a unless the Federal agency has designated a central point for the receipt of such notices. Notice shall inclidentification numbers(s) of each affected grant; (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(respect to any employee who is so convicted — (1) Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation. Act of 1973, as amended; or (2) Requiring such employee by a Federal, State, or local health,	Alternate	I. (Grantees Other Than Individuals)
of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken employees for violation of such prohibition; (b) Establishing an ongoing drug-free awareness program to inform employees about— (1) The dangers of drug abuse in the workplace; (2) The grantee's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and (4) The penalities that may be imposed upon employees for drug abuse violations occurring in the workplace; (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy statement required by paragraph (a); (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the employee will— (1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring workplace no later than five calendar days after such conviction. (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) femployee or otherwise receiving actual notice of such conviction. Employers of convicted employees must notice, including position title, to every grant officer on whose grant activity the convicted employee was wunless the Federal agency has designated a central point for the receipt of such notices. Notice shall inclidentification numbers(s) of each affected grant; (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(respect to any employee who is so convicted— (1) Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation. Act of 1973, as amended; or (2) Requiring such employee to participate satisfactority in a drug abuse assistance or rehabilitation approved for such purposes by a Federal, State, or local health, law enforcement,	A. The g	rantee certifies that it will or continue to provide a drug-free workplace by:
 (1) The dangers of drug abuse in the workplace; (2) The grantee's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace; (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy statement required by paragraph (a); (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the the employee will — (1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring workplace no later than five calendar days after such conviction; (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) free employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must notice, including position title, to every grant officer on whose grant activity the convicted employee was wurless the Federal agency has designated a central point for the receipt of such notices. Notice shall inclidentification numbers(s) of each affected grant; (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(respect to any employee who is so convicted — (1) Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation. Act of 1973, as amended; or (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate (g) Making a good faith effort to continue to maintain a drug-free workplace through implementat	(a)	Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the employee will — Abide by the terms of the statement; and Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring workplace no later than five calendar days after such conviction; (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) if employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must notice, including position title, to every grant officer on whose grant activity the convicted employee was wunless the Federal agency has designated a central point for the receipt of such notices. Notice shall inclidentification numbers(s) of each affected grant; (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(respect to any employee who is so convicted — Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation. Act of 1973, as amended; or Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation gapproved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragra (b), (c), (d), (e) and (f). The grantee may insert in the space provided below the site(s for the performance of work done in connection with specific grant: 	(b)	 (1) The dangers of drug abuse in the workplace; (2) The grantee's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
the employee will — (1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring workplace no later than five calendar days after such conviction; (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) for employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must notice, including position title, to every grant officer on whose grant activity the convicted employee was volumless the Federal agency has designated a central point for the receipt of such notices. Notice shall includentification numbers(s) of each affected grant; (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(respect to any employee who is so convicted — (1) Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation. Act of 1973, as amended; or (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation papproved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragra (b), (c), (d), (e) and (f). 3. The grantee may insert in the space provided below the site(s for the performance of work done in connection with specific grant:	(c)	Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a):
employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must notice, including position title, to every grant officer on whose grant activity the convicted employee was wunless the Federal agency has designated a central point for the receipt of such notices. Notice shall inclidentification numbers(s) of each affected grant; (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(respect to any employee who is so convicted— (1) Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation. Act of 1973, as amended; or (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation papproved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragra (b), (c), (d), (e) and (f). 3. The grantee may insert in the space provided below the site(s for the performance of work done in connection with specific grant:	(d)	 (1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the
respect to any employee who is so convicted — (1) Taking appropriate personnel action against such an employee, up to and including termination, consist the requirements of the Rehabilitation Act of 1973, as amended; or (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation papproved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragra (b), (c), (d), (e) and (f). 3. The grantee may insert in the space provided below the site(s for the performance of work done in connection with specific grant:	(e)	Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;
(b), (c), (d), (e) and (f).3. The grantee may insert in the space provided below the site(s for the performance of work done in connection with specific grant:	(f)	(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with
specific grant:	(g)	Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a (b), (c), (d), (e) and (f).
Place of Performance (Street address, city, county, state, zip code)		
	Place of F	Performance (Street address, city, county, state, zip code)
455 Capital Male, Suite 600		455 Cantol Male Suite 600
Sacramento, CA 95814		Sacramento, CA 95814
Checkif there are workplaces on file that are not identified here.	Check	if there are workplaces on file that are not identified here.
PART D: Certification Regarding Drug-Free Workplace Requirements	PART D:	Certification Regarding Drug-Free Workplace Requirements

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

PART E: Certification Regarding Lobbying Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF A	UTHORIZE	D CERTIFYING OFFICIA	AL h		
TYPED NAME AN	D TITLE	David &	1. Schuster	-	
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DATE	·	+ HPril	16, 1999		